

REMARKS

Claims 1 through 26, 28 through 32, and 34 through 40 are now pending in the application. Claims 1, 7, 17, 19, 24, 29, and 34 are herein amended. Claims 27 and 33 are herein canceled. The Examiner is respectfully requested to reconsider and withdraw the rejections of Claims 1-34 in view of the amendments and remarks contained herein.

Claims 35-40

The Office Action mailed September 27, 2005 on the cover sheet identified that Claims 1-40 stand rejected, but failed to identify in the body of the office action on which basis Claims 35-40 are rejected. Applicants therefore have not amended or further addressed Claims 35-40 herein and consider Claims 35-40 to be in allowable condition. The Examiner is respectfully requested to subsequently identify the basis for the rejection of Claims 35-40 or to withdraw the rejection of these Claims.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 5, 6, 16 through 19, 25 through 29 and 32 through 34

Claims 1, 5, 6, 16 through 19, 25 through 29 and 32 through 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Blankenship (U.S. Pat. No. 5,208,436). This rejection is respectfully traversed.

It is noted Claims 27 and 33 are herein canceled, rendering the 35 U.S.C. § 103(a) rejection of Claims 27 and 33 moot.

It is initially noted Claim 1 has been amended to recite in part:

“a plurality of process software each operable to conduct a joining operation for each of a plurality of programmed welding operations;

a plurality of welding process parameters defined for each of the plurality of programmed welding operations;
a plurality of parameter blocks each having at least one of the welding process parameters, each parameter block assignable to one of the plurality of welding operations; and
a program operable to interrogate only selected ones of the plurality of welding process parameters common to selected ones of the parameter blocks defined as a parameter block type and prevent interrogation of remaining ones of the parameter blocks not of the parameter block type.”

Support for this amendment is found in paragraphs [0018] and [0019] of the specification.

Blankenship teaches “The improvement in this torch comprises an identification circuit for identifying the torch, wherein the identification circuit has an electrical property unique to the specific characteristics of the torch and means for interrogating the identification circuit to sense the electrical property of the identification circuit.” See column 2, lines 38-47. Blankenship further teaches “When the connector, or plug is attached to the universal control station or power supply, the identification circuit in the torch can be interrogated for identifying the torch connected to the power supply.” See column 2, lines 50-53. Blankenship therefore teaches the ability to identify a specific welding tool or torch.

Blankenship does not teach or suggest a plurality of welding process parameters defined for each of the plurality of programmed welding operations, a plurality of parameter blocks each having at least one of the welding process parameters, each parameter block assignable to one of the plurality of welding operations, and a program operable to interrogate only selected ones of the plurality of welding process parameters common to selected ones of the parameter blocks defined as a parameter

block type and prevent interrogation of remaining ones of the parameter blocks not of the parameter block type. Blankenship therefore does not teach or suggest that the programming does not interrogate all of the existing parameters but only the parameters which are of relevance to the relevant process software.

The suggested modification of Blankenship therefore cannot render amended Claim 1 obvious. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claim 1. Because Claims 5, 6, and 16 through 18 depend from Claim 1, the suggested modification of Blankenship cannot render Claims 5, 6, or 16 through 18 obvious for at least the same reasons. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claims 5, 6, and 16 through 18.

In addition to Claim 1, Claim 17 has also been amended.

Claim 17 has been amended to maintain correct antecedent basis with amended Claim 1 and therefore not for patentability reasons.

The Examiner is respectfully requested to enter amended Claim 17.

It is initially noted Claim 19 has been amended to recite in part:

“a plurality of process software each operable to conduct a joining operation for each of the first and second welding processes;
a plurality of welding process parameters defined for each of the first and second welding processes;
a plurality of parameter blocks each having at least one of the welding process parameters, each parameter block assignable to one of the first and second welding processes; and

a program operable to interrogate only selected ones of the plurality of welding process parameters and to prevent interrogation of remaining ones of the welding process parameters.”

Support for this amendment is found in paragraphs [0018] and [0019] of the specification.

For at least the same reasons as noted above with respect to Claim 1, Blankenship does not teach or suggest that the programming interrogates only selected ones of the plurality of welding process parameters and is prevented from interrogating remaining ones of the welding process parameters. The suggested modification of Blankenship therefore cannot render amended Claim 19 obvious. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claim 19. Because Claims 25 through 28 depend from Claim 19, the suggested modification of Blankenship cannot render any of Claims 25 through 28 obvious for at least the same reasons. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claims 25 through 28.

In addition to Claim 19, Claim 24 has also been amended.

Claim 24 has been amended to maintain correct antecedent basis with amended Claim 19 and therefore not for patentability reasons.

The Examiner is respectfully requested to enter amended Claim 24.

It is initially noted Claim 29 has been amended to recite in part:

“communicating between the main controlling unit and the joining unit
using a plurality of process software;
storing the plurality of process software in a memory of the main
controlling unit;

defining a plurality of parameters in each of a plurality of parameter blocks divisible as a parameter block type for each of the plurality of process software; and
interrogating only a portion of the plurality of parameters, the portion defining only relevant ones of the parameters of a parameter block type for the process software while preventing interrogation of remaining non-portion ones of the parameters.”

Support for this amendment is found in paragraphs [0018] and [0019] of the specification.

For at least the same reasons as noted above with respect to Claim 1, the suggested modification of Blankenship cannot render amended Claim 29 obvious. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claim 29. Because Claims 32 through 34 depend from Claim 29, the suggested modification of Blankenship cannot render any of Claims 32 through 34 obvious for at least the same reasons. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claims 32 through 34.

In addition to Claim 29, Claim 34 has also been amended.

Claim 34 has been amended to maintain correct antecedent basis with amended Claim 29 and therefore not for patentability reasons.

The Examiner is respectfully requested to enter amended Claim 34.

Claims 2 through 4, 7 through 15, 20 through 24, 30 and 31

Claims 2 through 4, 7 through 15, 20 through 24, 30 and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Raycher et al. (U.S. Pat. No. 4,804,811) in view of Blankenship (U.S. Pat. No. 5,208,436). This rejection is respectfully traversed.

Raycher et al. teaches “The multiplexer is sequentially scanning all welding stations looking for a welding gun trigger signal. Upon receipt of a trigger signal, the multiplexer will then identify that particular welding station and then pass to the welding power supply the stored welding parameters for that particular welding operation.” See column 2, line 67 to column 3, line 3. Raycher et al. therefore teaches to search for a welding gun trigger signal, which is a signal common to all welding operations. Raycher et al. therefore teaches away from the Claim 1 limitation of “a program operable to interrogate only selected ones of the plurality of welding process parameters common to selected ones of the parameter blocks defined as a parameter block type and prevent interrogation of remaining ones of the parameter blocks not of the parameter block type”.

The suggested modification of Raycher et al. and Blankenship therefore cannot render amended Claim 1 obvious. Because Claims 2 through 4, and 7 through 15 depend from Claim 1, the suggested modification of Blankenship cannot render any of Claims 2 through 4, or 7 through 15 obvious for at least the same reasons. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claims 2 through 4, and 7 through 15.

In addition to Claim 1, Claim 7 has also been amended.

Claim 7 has been amended to maintain correct antecedent basis with amended Claim 1 and therefore not for patentability reasons.

The Examiner is respectfully requested to enter amended Claim 7.

In addition to the discussion above with respect to Blankenship, and for the same reasons as noted above, Raycher et al. teaches away from the Claim 19 limitation of “a program operable to interrogate only selected ones of the plurality of welding process parameters and to prevent interrogation of remaining ones of the welding process parameters”.

The suggested modification of Raycher et al. and Blankenship therefore cannot render amended Claim 19 obvious. Because Claims 20 through 24 depend from Claim 19, the suggested modification of Blankenship cannot render any of Claims 20 through 24 obvious for at least the same reasons. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claims 20 through 24.

In addition to the discussion above with respect to Blankenship, and for the same reasons as noted above, Raycher et al. does not teach or suggest the Claim 29 limitation of “interrogating only a portion of the plurality of parameters, the portion defining only relevant ones of the parameters of a parameter block type for the process software while preventing interrogation of remaining non-portion ones of the parameters”.

The suggested modification of Raycher et al. and Blankenship therefore cannot render amended Claim 29 obvious. Because Claims 30 and 31 depend from Claim 29,

the suggested modification of Blankenship cannot render either of Claims 30 or obvious for at least the same reasons. The Examiner is respectfully requested to withdraw the 35 U.S.C. § 103(a) rejection of Claims 30 and 31.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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